## The effects of green areas on the psyche and physique of people

Due to current challenges such as climate change and demographic change, urban green space is of outstanding importance in promoting health and improving the quality of life. The report "Green, natural, healthy: The potential of multifunctional urban spaces" from the Federal Agency for Nature Conservation has shown that green spaces have a positive effect on people's health, especially in the living environment. It is the health natural balance functions of green spaces that have a positive effect on physical and mental health.

## The influence on the physical condition of people

Examples of this are the cooling of the urban air temperature by the shadow cast and evaporative cooling during the day and the production of cold air at night, which contributes to the increase in thermal comfort in the city, as well as the filtering of air pollutants and dust by the trees and shrubs. People particularly benefit from this when they visit the respective green space. People also recover more quickly from illnesses by looking at green plants or being around them. Being outdoors reduces heart rate and blood pressure. Sport in green spaces promotes physical recovery more than in closed rooms or "grey surroundings" (Rittel et al. 2014). A stay in the forest increases the immune system, since plants in the forest release chemical compounds, so-called terpenes, to "communicate" with each other. These serve to warn other plants of attackers or pests. The plants then ramp up their immune systems to protect themselves. It has been shown that when people inhale these substances, for example in an urban environment (Hoffschulte 2017) or through skin contact, our immune system produces significantly more NK cells (natural killer cells).

## The influence on people's mental state

on people's psyche have a positive effectStaying in green spaces promotes psychological well-being, has a stress-reducing, relaxing and calming effect and also promotes spiritual experience. This can have a positive effect on cognitive and emotional development and improves attention, concentration and work performance (Rittel et al. 2014). It is still unclear exactly why green spaces have a positive effect on the human psyche. But a study from England discovered a connection between the release of the stress hormone cortisol and the proportion of green space near the home (Endlicher et al. 2016). One hypothesis is that humans have a genetically ingrained tendency to respond to perceptions of nature with positive emotions. This in turn contributes to the well-being of people (ibid.). In addition, green spaces have aesthetic and symbolic potential. People have an inherent preference for biodiversity and perceive it as particularly "beautiful". In this way, green areas can symbolize a successful human-nature relationship, evoke pleasant memories and contribute to identification with the place and thus overall well-being. Green spaces therefore have a social impact. Staying in green spaces promotes the social development of children on the one hand and the social interaction and communication of users on the other. In this way, isolation and feelings of loneliness are reduced (Rittel et al. 2014).

copyright: Miles Dohme, 2022

## Sources:

K. Hoffschulte (2017): Health from the forest. In: Karl and Veronica Carstens Foundation (ed.): Members' journal of nature and medicine eV, issue 5/2017

Rittel, K., Bredow, L., Wanka, E., Hokema, D., Schuppe, G., Wilke, T., Nowak, D. und S. Heiland (2014): Grün, natürlich, gesund: Die Potenziale multifunktionaler städtischer Räume, Bonn

copyright: Miles Dohme, 2022